GPE Examination Check List

Pre-Exam
Stand on right side of patient
Greetings: Asalam-o-Alaikum
Introduction
Consent
Ask examiner you will like to expose patient fully , have drape , screen for privacy
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc. Meanwhile assess Hoarsness
Look and Ask if patient is having an IV line (Branula) , if yes , at which site
Exposure : remove shirt (If time allows)
Position: lying straight on bed with small pillow under head , arms by the side OR sitting
Look for NG , Foley , Drain and its contents
General Look Go to foot end
Age , gender , posture , comfort , demeanor , built/physique
Look for catheters , sputum jar , urine colour
Ask for tenderness in any part of body
Vitals
Insert Thermometer in axilla and check temperature at end
Pulse : rate , rhythm , volume , character , check for collapsing pulse
Blood pressure
Respiratory rate
Hands
Nails : Clubbing (in profile view) , Leuconychia , Koilonychia , splinter hemorrhages , Cyanosis , Quincke's sign , Discolouration (Mee's line , Beau's line) , Nail pitting ,
Fingers : PIP/DIP nodules , Joint swelling , subcutaneous nodules ,
Hands : feel palm for temperature and sweating , deviation , palmar erythema , wasting of palm or guttering at dorsum , Pallor , cyanosis **Skin:** is skin tight?
Arm : look for bruises , Tatoos Epitrochlear Lymph nodes
Axilla : axillary lymph nodes , Acanthosis nigricans
Face
Scalp: deformity , hair
Face: complexion , 7th nerve , puffiness , shape , mask like , malar flush , butterfly rash , coarse skin
Eyes: Ptosis , miosis , pallor , jaundice , Arcus , calcification , dryness , Thyroid signs (staring look , exophthalmos , lid lag, lid retraction , loss of lateral 1/3 of eyebrows in hypothyroidism)
Nose: Lupus pernio
Lips: cyanosis , angular stomatitis ,
Oral Cavity: oral ulcers , on palate , blackish discoloration in mucormycosis , uvula , Ah test, Orodental Hygiene
Tongue: glossitis , cyanosis , pallor on ventral surface , Color (red beefy , strawberry) , aphthous ulcers , Deviation of tongue , macroglossia
Jaw : ask him to clench teeth (check proganthism)
Neck

Mees Line

Beau's Line

fig. 152-9 Fig. 152-10 Fig. 152-11

Neck : ask him to take sip of water (thyroid) , JVP , neck veins
Cervical lymph nodes : check from back …….. Look for spider angiomas , any finding , sacral edema
Exophthalmos , protrusion of eyes, spine tenderness
Chest : Visible deformity , Gynecomastia , listen to heart and back of chest if clubbing +ve. Auscultate heart if severe anemia (for murmur ,) , sternal tenderness
Abdomen : Visible deformity (check liver & spleen if lymphadenopathy or pallor) Abdominal lymph nodes
Inguinal region : hernia orifices , inguinal lymph nodes
Legs: skin lesions , pedal edema , visible deformity
Ophthalmoscopy :
Tell examiner you would like to examine genitalia
End of exam
Say thanks
Drape the patient

Minimum Exam in GPE

04 Vitals (Pulse,BP,RR,Temp)
06 Non Vitals :

i. Hands & Arms
ii. Face (Scalp,face,eyes,mouth)
iii. Thyroid
iv. JVP
v. Lymph Nodes
vi. Legs

Examination Sequence
sitting from front
sitting from back
lying at 45 degree
flat

Acromegaly Scheme

Command: GPE

Vitals		
	Pulse	
	B.P.	HTN in 15 % cases
	R.R.	
	Temp	
Hands		
Hand Shake	1. Moist, doughy hands with 2. Excessive sweating & 3. Enveloping handshake 4. Thick skin	
Morphology	1. Large hands 2. broad palms 3. spatulate fingers 4. volume of hands is increased	
Carpal Tunnel Syndrome	Wasting of the thenar eminence	
	Look carefully for scar of previous surgery (hidden by the crease of the wrist).	
	Check motor component of thumb: Weakness of flexion, abduction and opposition of thumb	
	Diminished sensation over lateral three and half fingers	
	tap over flexor retinaculum ; patient may experience tingling	**Tinel' Sign**
	Ask the patient to hyperextend the wrist maximally for 1 min; this may bring on symptoms i.e. dysaesthesia over the thumb and lateral two and half fingers):	**Phalen's test** / Reverse Prayer Sign
Arms & Axilla		
	skin tags	Molluscum Fibrosum
	Black velvety papillomas	Acanthosis Nigricans
Face		
Forehead	Prominent supraorbital ridges	
Nose	Large Nose	
Oral Cavity	Large lips	
	Protrusion of the lower jaw	prognathism

	ask the patient to clench his teeth and note	malocclusion and splaying of the teeth i.e. interdental separation
	Show your tongue : look for impressions of the teeth on the edges of the tongue	macroglossia
Eyes		
	Bitemporal Hemianopia	
	Fundoscopy , DM, HTN Retinopathy	Optic atrophy
Neck		
	Goitre	
Chest		
	Gynaecomastia	
	Galactorrhoea	
Abdomen		
	Hepatomegaly	
	Splenomegaly	
Musculoskeletal		
	Osteoarthrosis	
	Chondrocalcinosis	
	Kyphosis (forward bending) , Check proximal myopathy	
Precordium		
	Displaced apex beat , pitting edema for HF	cardiomegaly
Tell Examiner you would like to do		
	Examine urine for sugar	impaired glucose tolerance

Legs: pedal edema, thickened heel pad

Description

GPE of this cooperative gentleman revealed

- Pulse of 84.min, regular.
- His Brachial Blood Pressure is 140/80 mmHg
- Respiratory rate is 20/min
- Axillary Temperature is 99 °F

Handshake was Enveloping. Hands are large, Moist, doughy, with Excessive sweating. Palms are broad, with spatulate fingers. Volume of hands is increased with thick skin

Tinel' Sign: tap over flexor retinaculum

Command: **Examine the pulse and do the relevant examination**

Pre-Exam
Stand on right side of patient
Greetings: Asalam-o-Alaikum
Introduction
Consent
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.
Position: at 45°
Ask if patient is having an IV line (Branula) , if yes , at which site
Exposure : ideally remove shirt, if does not allow, INFORM examiner and expose from clavicles to umbilicus
Look for NG , Foley , Drain and its contents
Insert Thermometer in axilla and check temperature at end
EXAMINATION
Radial Pulse: rate , rhythm , volume , character , vessel wall Check for radio-radial delay Check for radio-femoral delay
Check **Brachial** pulses B/L
Check **Carotid** pulses one by one : comment on slow-rising , bisferiens , parvus
Check B/L femoral pulses
Check B/L popliteal pulses
Check B/L posterior tibial artery
Check B/L dorsalis pedis artery
Apply BP cuff on arm , pulsus alternans : deflate cuff slowly , no of sounds double when cuff is deflated little below systolic BP pulsus paradoxus : deflate cuff 2mmhg , sounds heard only in exp first … on further deflation , sounds heard in insp too Difference between these two pressures is pulsus paradoxus
Examine the precordium and relevant specially opthalmoscopy

Gastrointestinal System Examination Check List

Command: Examine the abdomen and do the relevant examination

Action	
Pre-Exam	
Check Environment comfortability : Light , temperature	
Stand on right side of patient	
Greetings: Asalam-o-Alaikum	
Introduction	
Consent	
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.	
Position: Supine, arm by the side of patient Head resting only on 1 or 2 pillows	
Ask if patient is having an IV line (Branula) , if yes , at which site	
Exposure : From nipples to mid-thigh If could not , tell examiner you will to expose to this extent	
Look for NG , Foley , Drain and its contents	
Insert Thermometer in axilla and check temperature at end	
Inspection	
From: Above, Foot end and from right side of patient Ask him to take deep breath Elevate your head سر اوپر اٹھائیں	Divarication of Recti
Shape of abdomen; If distended, generalized or localized	
Abdomen moving with respiration	
Pattern of respiration	
Umbilicus	
Any visible skin deformity	
Visible veins; If yes , direction of flow	
Visible pulsations	
Scar Marks , Ascitic tap marks , adhesive sticking applied	
Pattern of pubic hair distribution	
Check Hernia orifices , Cough Impulse, Ask patient to cough and see bulging at site of Hernial orifices	
Palpate inguinal Lymph Nodes	
Palpation	
Ask for tenderness	
Warm hands if needed	
During palpation , look at face of patient [for tenderness]	

Superficial palpation … in S shape ; LIF →Lt.Lumbar →LHC →Epigastric → Umbilical →Hypogastric → RIF → Rt. Lumbar →RHC Assess for mass , Muscle tone : soft , guarding If mass palpable , ask patient to LIFT neck [tenses abd. Muscles] ..abd. wall mass still palpable , intraabdominal NOT	
Palpate for Liver , **If palpable , percuss** upper border in breath held in expiration use dipping method if massive ascites Span in Cm	Span, Edge,Surface, Consistency
Palpate Spleen, **If not ,** roll towards yourself and then palpate **Still Not palpable, Percuss** over lateral chest (Traube,s Semilunar Space) for dullness over spleen If felt , ask him to take deep breath	Moves with respiration
Bimanual palpation for Kidneys	
Aortic Lymph Nodes	
Palpate for urinary bladder	
If visible pulsation , check is it expansile	
Percussion	
Percuss upper border of urinary bladder	
Shifting dullness	
Fluid Thrill	
Auscultation	
Bowel Sounds at umbilicus	
Hepatic Rub	
Splenic Rub	
Renal Bruit on both sides	

Examination of Genitelia:
Scrotal examination, testicular atrophy

Para

Tell examiner you will like to do Per Rectal Examination	
Relevant Exam	
Elevate head end to 45 ° and check for 1. JVP 2. Precordium (IE, CCF) 3. Sternal tenderness	
Ask him to sit and examine for:	
Dorsum of Hands: 1. Deformities of RA 2. Nails: I. Leukonychia II. Koilonychia III. Clubbing IV. Guttering	
3. Spread your hands ہاتھ پھیلا لیں /Flapping Tremors	Asterixis
4. Palms : ہاتھ سیدھے کر لیں i. Palmar Erythema ii. Anemia iii. Dupuytren contracture	

5. Pulse	
6. Bruises on arms, ,Tatoos	
7. Epitrochlear Lymph Nodes	
8. Axillary L.N,	
9. **spider angiomas above the level of nipple**	
10. Gynecomastia , Sternal Tenderness	
11. Loss of scalp hair	
12. Eyes: i. Pallor ii. jaundice ,	
13. Face: i. facial puffiness ii. parotid swelling	
14. Mouth: i. Tongue : glossititis ii. oral ulcer iii. angular stomatitis iv. Lichenoid Lesions v. Waldeyer's Ring	
JVP (if ascites is there)	
Legs: Pedal Edema, Pyoderma gangrenosum, Erythema Nodosum (Sarcoidosis)	
Go Behind the patient	
15. Cervical L.N. 16. Chest : Percuss and auscultate bases of lungs ; effusion , crepts (sarcoidosis)	
TELL EXAMINER YOU WILL LIKE TO DO	
Examination of genitelia : for testicular atrophy in CLD	
PR rectal examination	
Breast exam in suspecting metastatic Breast disease	
Slit Lamp exam (Wilson's) and Detailed chest exam (Alpha 1 antitrypsin deficiency)	

CVS System Examination Check List

Command: **Examine the precordium and do the relevant examination**

Pre-Exam
Stand on right side of patient
Greetings: Asalam-o-Alaikum
Introduction
Consent
Ask examiner you will like to expose patient fully , have drape , screen for privacy
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.
Position: at 45°
Ask if patient is having an IV line (Branula) , if yes , at which site
Exposure : ideally remove shirt, if does not allow, INFORM examiner and expose from clavicles to umbilicus
Look for NG , Foley , Drain and its contents
Insert Thermometer in axilla and check temperature at end
Inspection
From: foot end and from right side of patient
Shape of chest
Visible apex beat
Visible pulsations in chest , neck (dancing carotids) , suprasternal , epigastrium and RHC
Scars e.g. mid-line sternotomy scar
Visible veins ; If yes , direction of flow [to be assessed on palpation] for SVC obstruction
Neck veins : engorged
Palpation
Warm hands if needed
Tenderness : First ask then check by palpating
Apex Beat: on lying supine →moderate left lateral→ on sitting & leaning forward→check on right side for dextrocardia → impalpable Comment on Character , area
Place hand for thrill on left side vertically
Place hand for palpable P2 on pulmonary area horizontally
Place hand for palpable thrill on A2 horizontally
Palpate right side neck for radiation of AS
Check for left parasternal heave
Check epigastric heave
Palpate for pulsatile liver + check JVP and do hepatojugular reflux

Auscultation
Keep THUMB on carotid
Listen at **mitral area** for S1 and Gallop rhythm Listen at **pulmonary area** for S2 and splitting

At **Mitral area** Listen for MS , AS , Gallop Rhythm and any other murmur Hold breath in end inspiration (insp) and expiration(exp) and check effect on murmur Check for radiation in axilla Change to bell , auscultate . then ask to be left lateral (for MS) On return , switch back to diaphragm
At **Tricuspid Area:** Auscultate , then at end insp and exp
At **A2 Area:** Auscultate , then at end insp and exp
At **Pulmonary Area:** Auscultate , then at end insp and exp
At **A1 Area:** Auscultate , then at end insp and exp
Auscultate in neck for radiation and carotid bruit
Ask patient to sit and lean forward , Auscultate on A1 & A2 for AR
Relevant Examination
Auscultate base of lungs for crackles , ronchi (COPD →A.fib) , pleural effusion (CCF)
Check sacral edema
Nails : clubbing , cyanosis , splinter hemorrhages , Quincke's sign
Fingers : feel pulp for Osler nodes , gangrene , nicotine staining
Palm: janeway lesions , pallor ,
Pulse: rate , rhythm , volume , character , radio-radial and radio-femoral delay Check for collapsing/water-hammer pulse (ask for pain in shoulder first)
Check Blood Pressure
Look for needle marks (IV drug abuse) in both arms
Look for tendon xanthomas
Face: facial puffiness , malar flush , head-nodding (Demusset's sign)
Eyes: Pallor , jaundice (due to congested liver) , Xanthelasmas
Mouth : Central cyanosis , pulsating uvula (Mueller's sign in AR)
Neck: You have already checked JVP , just show to examiner as you are looking for JVP , Thyroid
Abdomen : ask tenderness , Palpate **liver** , if palpable , check upper border and span , Palpate **spleen** Shifting dullness , fluid thrill for ascites (CCF) Palpate kidney if HTN+ve for Polycystic kidney disease , Ausculate renal artery bruit
Auscultate Femoral Arteries : for Tranbe's pistol shots , Durozier's sign
Check Pedal oedema , Erythema marginatum
Feet : same as hand , gangrene
Ophthalmoscopy , if no time , inform examiner Comment on Roth spots , Diabetic and hypertensive changes
End of Exam
Cover/drape the patient
Say Thanks

Description of precordial Examination & Relevant

Opening Sentence	Precordial examination of this gentleman who was conscious, cooperative and comfortable during examination (/at rest) revealed
Inspection	1. visible pulsations in the precordium , neck & epigastric/RHC area. Without any 2. chest deformity (shape) or 3. scar marks (sternotomy, thoracotomy) 4. Neck veins are distended/engorged (JVP). 5. JVP is raised 5cm above the sternal angle with CV wave(TR) with +ve heapto jugular reflex
Palpation	1. Apex beat is well localized in the 5th intercostal space , just medial to MCL, its tapping in character. 2. There is left parasternal heave and 3. Pulmonic component of 2nd heart sound is palpable. 4. No thrill is palpable.
Auscultation	1. Both first and second heart sounds are audible 2. First Heart sound is loud at apical area 3. Pulmonic component of 2nd heart sound is loud with normal splitting. No 3rd or 4th Heart sound is audible. 4. There are no added heart sounds (OS, EC, Metallic sounds/click, Pericardial rub, pleuro-pericardial rub). 5. A Grade 3 low pitched, rumbling , mid-diastolic murmur is present at apical area , best heard with bell with breath held in expiration in left lateral positon. 6. A Grade 3 Pansystolic murmur is present at left lower sternal edge, best heard with diaphragm and breath held in inspiration. 7. Both the bases of lungs are clear
Pulse	Radial Pulse is 72/min, regular, without any special character. There is no radio-radial or radio-femoral delay.
B.P.	Brachial B.P. in right arm is 120/80 mmHg
Temp	Afebrile (Normal temp is 97.5 – 99.5 F: Hutchison)
JVP	Already told
Relevant Examination On Relevant Examination	
+ve findings	He has got pallor. Etc …. Then tell negative ones
Hands	There are <u>no peripheral stigmata of infective endocarditis</u> (clubbing, splinter hemorrhages, nail fold infarcts, osler nodes, janeway lesions) There is a tatoo mark/needle marks on right forearm. There is no pallor,jaundice, cyanosis, malar flush. Light reflex intact (Argyl Robertoson pupil in AR) Orodental hygiene is adequate. There is no heapto or splenomegaly. No evidence of free fluid in the abdominal cavity. No tenderness in flanks (renal involvement)

	No scar at antecubital fossa or femor (of cardiac catheterization) No sacral or pedal edema. No roth spots on fundoscopy Patient is able to move all four limbs with B/L down going plantars

Viva :

Based upon the findings , my diagnosis is

1. Mitral Stenosis with pliable and pulmonary hypertension,
2. Most likely due to Rheumatic Heart Disease,
3. Patient is not in Heart Failure at the moment
4. Without any evidence of thromboembolic phenomenon
5. And possible in the sinus rhythm

Valvular Heart Disease Severity Criteria & AHA 2014 Class 1 Indications of Intervention

Murmur	Echo Criteria of Severity	Class 1 Indications of intervention
Aortic Stenosis Vmax= max aortic velocity	i. Aortic valve area ≤1.0 cm^2 + ii. Resting Aortic Vmax < 4m/s OR iii. Mean Pressure Gradient <40 mmHg	**1. ALL SYMPTOMATIC patients** On history or on exercise testing (Stage D1) **2. ASYMPTOMATIC** patients with severe AS + **LV Dysfunction** LVEF <50%(C2) **3. severe AS** (stage C or D) when **undergoing other cardiac surgery** **Indications for TAVR in AS** 1. Indication for AVR BUT **Prohibitive** surgical risk (predicted risk with surgery or major comorbidity>50% at 1 year or or >3 organ systems compromised) 2. Indication for AVR BUT **High** surgical risk(STS predicted risk of mortality>8% or ≥2 organ systems)
Aortic Regurgitation ERO= Effective regurgitant orifice Vena Contracta	i. Regurgitant volume > 60ml/beat, ii. Regurgitant fraction >50% iii. ERO ≥ 0.3 cm^2 iv. Vena Contracta > 0.6 cm v. Doppler jet width >65% of LVOT	1. All **symptomatic** patients (D) 2. **Asymptomatic Severe** AR with **LVEF <50%** (C2) 3. **Severe AR** (C or D) while undergoing **cardiac surgery for other indication** **Aortic Root Replacement or Repair:** Aortic root diameter of sinuses or ascending aorta >5.5 cm (in patients with bicuspid aortic valve)
Mitral Stenosis Diastolic pressure half time Wilkin Echo Score	i. MVA < 1.5 cm^2 ii. Diastolic pressure half time > 150ms*	**1. PMBC** for **Symptomatic, severe** MS **AND** favorable valve morphology (Echo Score < 8), No clot in LA, NO moderate to severe MR **2. MV Surgery** (Repair = Commissurotomy = MVR) in **severe symptomatic MS** **WITH** No high risk for surgery, Not candidate for PMBC OR Failed PMBC **3.** MV Surgery FOR severe MS (Stage C or D) when other cardiac surgery is done
Mitral Regurgitation	i. Regurgitant volume > 60ml/beat, ii. Regurgitant fraction >50% iii. ERO ≥ 0.4 cm^2 iv. Vena Contracta >0.7 cm v. Central jet MR > 40% LA	1. MV Surgery* ----for---- Symptomatic severe MR AND **EF >30% (**Stage D) 2. MV Surgery* ----for---- **Asymptomatic** sever MR AND LV Dysfunction i.e. EF 30-60% **& /or** LVESD≥40mm (Stage C2) 3. MV Surgery FOR severe MR when other cardiac surgery is done *Repair preferred over MVR whenever possible

Respiratory System Examination Check List (Back)

Pre-Exam	
Stand on right side of patient	
Greetings: Asalam-o-Alaikum	
Introduction	
Consent	
Ask examiner you will like to expose patient fully , have drape , screen for privacy	
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc. Meanwhile assess Hoarsness	
Look and Ask if patient is having an IV line (Branula) , if yes , at which site	
Exposure : remove shirt	
Position: sitting , back towards you , hands crossed on both shoulders	
Look for NG , Foley , Drain and its contents Sputum	
Insert Thermometer in axilla and check temperature at end	
Inspection	
Give a general look	
From: back amd then from looking above from scapula	
Posture of patient , comfort ability	
Shape of chest , Symmetry ,	
Ask patient to take a deep breath and B/L moving with respiration	
Visible veins , scars , pulsations radiation mark	
Using accessory muscles : intercostal & subcostal recessions ,	
Supraclavicular fossae: fullness/ indenting	
Look at hands (while crossed on shoulder) for clubbing , cyanosis	
Palpation	
Ask and then Check tenderness , also bone tenderness , also on spine. Look at face of	
Check apical chest movements	
Check chest movements at level of nipple and below	
Chest expansion to be checked in sitting position later at the level of 5th ICS	
Check vocal fremitus apex , intrscapular , 2 points below scapula then lateral	
Check pedal oedema	
Percussion	
Tell patient what and how you will do	
Apex: 3 points and compare each separately , then interscapular , then below scapula and	
Auscultation	
Always compare , first normal than with deep respiration	
Supraclavicular → then inter scapular and then infrascapular.. don't go more than 2 ICS	
Comment on 1. intensity of breath sounds 2. Duration of inspiration 3. Character i.e. vesicular & bronchial 4. Any added sounds : crepitations , rhonchi , rub	

Vocal resonance	
Any other sign : whispering pectorlique , aegophony , coin sign	
Check cervical lymph nodes	
Buffalo hump (due to steroid use)	
Make the patient lie	
Check position of trachea , tracheal tug , FET , apex beat	
Go to foot end , look to confirm findings of back e.g. bulging chest in one side	
Look for chest tube , tap marks , movement of alae nasi	
Perform examination if needed	
Relevant Examination	
Nails : clubbing , cyanosis ,	
Hands: warm , astrerixis , nicotine staining , wasting of hands	
Wrist : check for hypertrophic pulmonary osteoarthropathy	
Pulse : rate & rhythm (a.fib)	
B.P. , Check Temperature	
Brusining of skin , Proximal muscle wasting (by use of steroids in COPD , Asthma)	
Axilla : lymph nodes , Check for acanthosis nigricans	
Eyes: pallor , jaundice (Corpulmonale → congested liver) , Horner syndrome (Ptosis ,	
Face: Butter fly rash in SLE , facial puffiness (pulmonary renal syndromes)	
Mouth : cyanosis , dental hygiene (caries)	
Neck : Thyroid , JVP , non-pulsatile neck veins in SVC obstruction , cervical lymph nodes	
Supraclavicular lymph nodes	
Auscultate for P2 , and heart sounds	
Abdomen : check ascites by shifting dullness (Meig syndrome) , check liver , spleen	
Legs: pedal edema, erythema nodosum (TB)	
Fundoscopy: choroid tubercules , papiloedema in CO2 retention , Brain abscess sec to lung abscess	
End of Exam	
Cover/drape the patient	
Say Thanks	

Respiratory System Examination (Front)

Pre-Exam
Stand on right side of patient
Greetings: Asalam-o-Alaikum
Introduction
Consent
Ask examiner you will like to expose patient fully , have drape , screen for privacy
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc. Meanwhile assess Hoarsness
Look and Ask if patient is having an IV line (Branula) , if yes , at which site
Exposure : remove shirt
Position: lying straight on bed with small pillow under head , arms by the side
Look for NG , Foley , Drain and its contents Sputum jar
Insert Thermometer in axilla and check temperature at end
Inspection
From: foot end and from right side of patient
Posture of patient , comfort ability , look at hands to get clue for clubbing (and then consider its DD)
Shape of chest , Symmetry ,
Ask patient to take a deep breath and B/L moving with respiration
Visible veins , scars , pulsations
Using accessory muscles : movement of alae nasi , intercostal & subcostal recessions ,
Supraclavicular fossae: fullness/ indenting
Pursued lips
Ask him to cough . look for epigastric hernia
Count respiratory rate , pattern of breathing
Palpation
Check tenderness , also bone tenderness , Look at face of patient .
Check position of Trachea , Check Apex Beat
Check apical chest movements
Check chest movements at level of nipple and below
Chest expansion to be checked in sitting position later at the level of 5th ICS
Check for crepitations (sub-cutaneous emphysema)
Check vocal fremitus
Percussion
Tell patient what and how you will do
First check upper border of liver
supraclavicular → direct on clavical → then 2-6 ICS by standard method Make inverted V on chest Lateral Percussion : make the patient sit , hands on head and percuss
Auscultation

Always compare , first normal than with deep respiration
Supraclavicular → then 2-6 ICS on front → 4^{-7} ICS laterally
Comment on 1. intensity of breath sounds 2. Duration of inspiration 3. Character i.e. vesicular & bronchial 4. Any added sounds : crepitations , rhonchi , rub
Vocal resonance
Any other sign : whispering pectorlique , aegophony , coin sign
Check apex beat
Make the patient sit
Check tracheal tug , FET
Measure chest expansion by measuring tape
Examine back of chest : at least auscultation
Relevant Examination
Nails : clubbing , cyanosis ,
Hands: warm , astrerixis , nicotine staining , wasting of hands
Wrist : check for hypertrophic pulmonary osteoarthropathy
Pulse : rate & rhythm (a.fib)
B.P. , Check Temperature
Brusining of skin , Proximal muscle wasting (by use of steroids in COPD , Asthma)
Axilla : lymph nodes, Check for acanthosis nigricans
Eyes: pallor , jaundice (Corpulmonale → congested liver) , Horner syndrome (Ptosis , Miosis)
Face: Butter fly rash in SLE , facial puffiness (pulmonary renal syndromes)
Mouth : cyanosis , dental hygiene (caries)
Neck : Thyroid , JVP , non-pulsatile neck veins in SVC obstruction , cervical lymph nodes
Supraclavicular lymph nodes
Auscultate for P2 , and heart sounds
Abdomen : check ascites by shifting dullness (Meig syndrome) , check liver (enlarged tender in abscess)
Legs: pedal edema, erythema nodosum (TB)
Fundoscopy: choroid tubercules , papiloedema in CO2 retention , Brain abscess sec to lung abscess
End of Exam
Cover/drape the patient
Say Thanks

First Cranial nerve (Olfactory)

Pre-Exam
Stand on right side of patient
Greetings: Asalam-o-Alaikum
Which language can you understand better , urdu , Punjabi , Saraiki ?
Introduction
Consent
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.
First Cranial nerve
Ask him 1. Can he smell normally before? **2.** Are you allergic to any thing? **NB:** 1. Check each nostril separately **Perform:** 1. Check with any bedside object e.g. fruits etc. 2. Check selected substances in similar bottles

2nd Cranial Nerve(Optic)

Pre-Exam

Stand on right side of patient

Greetings: Asalam-o-Alaikum

Which language can you understand better , urdu , Punjabi , Saraiki ?

Introduction

Consent

Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.

Examination

Perform:

1. **Visual Acuity :** **NB:** Check each eye one by one , DON'T CHECK BINOCULAR ACUITY
   a. Check for any distant object **… Can skip it, far vision is due to refractory problems, not neurological problems**
   b. Check by handheld near vision chart
2. **Visual Field:**
   - **A. Peripheral Vision**
     a. **Binocular :**
        i. Distance should be 1 arm length between you & patient
        ii. You should be at level of patient
        iii. Ask him to look into your eyes
        iv. Ask him to tell you finger of which side is moving when you come inside from both sides . move fingers separately & then both at a time
        v. Test each quadrant separately
     b. **Uniocular :**
        i. Check each eye separately
        ii. **For patient left eye :** ask him to close right eye & close your left eye
        Ask him to look into your eye
        Bring finger from right side upper & lower quadrant
        Then bring finger from left side
        iii. **For patient right eye :** ask him to close left eye & close your right eye
        Ask him to look into your eye
        Bring finger from left side upper & lower quadrant
        Then bring finger from right side upper & lower quadrant
   - **B. Central Vision:**
3. **Colour Vision :** Check by isharah chart
4. **Light Reflex:**
   i. Tell examiner you like to have day/adequate light for this
   ii. Ask patient to look straight on a distant object
   iii. Shine light into one eye and look on reaction of pupil in same eye **(Direct)**
   iv. Shine light into one eye and look on reaction of pupil in OPPOSITE eye **(Consensual)**
   v. **Check for RAPD if light reflex is not normal:**
5. **Accommodation Reflex:**
   Ask him to look at a distant object and then near (his nose, your finger)
   Look for convergence , miosis
6. **Ophthalmoscopy:**
   Pre-requisites:
   1. Consent
   2. Tell examiner you would like to have **Dark room**
   3. Tell examiner you would like to have eyes **Dilated**
   4. **Tell patient** you will come with this instrument , you may come very near , you will not harm him… **Do Not look into light**
   5. Patient right eye , your right eye and use right hand & vice versa

6. **Disc:** comment on **MCC** (Margins , Cup , Colours) **, Vessels , Colour of fundus & any findings**
7. Then ask him to look into the light … to see fovea
8. At the end , say thanks

3rd , 4th , 6th Cranial Nerves

Pre-Exam

Stand on right side of patient

Greetings: Asalam-o-Alaikum

Which language can you understand better , urdu , Punjabi , Saraiki ?

Introduction

Consent

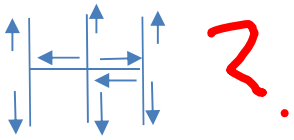
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.

Instruct Patient :

1. Do not move your head. Just move eyes
2. Follow my finger wherever it goes
3. If you see DOUBLE image at any time , inform me

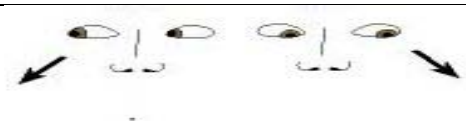
3rd Cranial nerve

1. Look at posture of Head : tilt of head indicates compensatory posture to correct diplopia
2. Look for ptosis
3. Look for position of eyeballs : both should be in center in normal forward gaze
4. Check Pupil size
5. Check Movements in H shape



6. Check Light Reflex
7. Check accommodation reflex

4th Cranial Nerve (SO4)



Checking Left 4th Nv

Checking Right 4th Nv

6th nerve (LR 6)

Check both lateral rectus

If there is diplopia in one eye , check it in other eye.

Unilateral diplopia : Neurological

Bilateral diplopia: eye problem

5th Cranial Nerve

Pre-Exam
Stand on right side of patient
Greetings: Asalam-o-Alaikum
Introduction
Consent
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.

Examination of 5th nerve

Motor Part:

1. Ask him to clench his teeth. Check/feel bulk of masseters
2. Ask him to clench his teeth. Check/feel bulk of temporalis
3. Ask him to move jaw from side to side and then against resistance
4. Jaw Jerk do only if other positive findings there

Sensory Part:

1. Check Touch , Pain , Temperature in each division of 5th Nerve separately and compare
2. Corneal reflex
3. Conjuctival reflex

7th Cranial Nerve

Pre-Exam
Stand on right side of patient
Greetings: Asalam-o-Alaikum
Introduction
Consent
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.
Examination
1. Check hyperacusis 2. Frowning : ask him to look at ceiling 3. Ask him to close eyes forcefully and try to open 1 4. Look for dribbling of saliva / patient taking tissue to clean saliva 2 5. See nasolabial folds 6. Ask him to show teeth and comment on deviation of angle of mouth 7. Ask him to smile 8. Ask him fill cheeks with air and then gently tap 9. Check corneal & conjuctival reflex 10. Tell examiner you will like to check whistling , taste over anterior 2/3 of tongue

9th, 10th, 11th , 12th Cranial Nerve

Pre-Exam
Stand on right side of patient
Greetings: Asalam-o-Alaikum
Introduction
Consent
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.
Examination of 9th nerve
1. Is NG in place i.e. gag not intact 2. Check gag reflex. Touch each side of pharynx separately 3. Palatal Reflex: touch soft palate with blunt probe, ask patient about felt or not (sensory) , check movements of soft palate 4. Check taste over posterior 1/3 of tongue 5. Carotid massage and observe associated slowing of heart rate
Examination of 10th nerve
1. Nasal twang in speech : Ask him to say egg .. he will say eng 2. See uvula . is it central? 3. Aah test: ask him to say aah. See if uvula elevates and posterior pharyngeal wall constricts 4. Ask him to cough 5. Check Gag reflex. Touch each side of pharynx separately 6. Check palatal reflex 7. Indirect laryngoscopy 8. Carotid massage
Examination of 11th nerve
1. Look at bulk , wasting , atrophy of both muscles 2. Look for involuntary movemnts 3. Test each sternocleidomastoid separately. Feel the opposite muscle 4. Ask him to move head down normal and than against resistance 5. Ask him to shrug his shoulders for trapezius
Examination of 12th nerve
1. Examine the tongue with in oral cavity for fasciulations , wasting 2. Ask him to protrude. Look for deviation. 3. Ask him to move tongue on each side 4. Move tongue on each side against cheek. Check for resistance

Tongue(12th CN) and Jaw (5th CN) never lie. i.e. if tongue deviated to right , lesion is in right 12th CN

Examine ALL cranial Nerves

Pre-Exam

Sit on chair OR stand on right side of patient… Sit at level with patient

Greetings: Asalam-o-Alaikum

Introduction

Consent: I shall examine your face

Ask Patient Name and call him/her by name instead of calling Aman g, Bibi etc.

Meanwhile assess Hoarseness

Inspect

Obvious findings: ptosis, proptosis,
loss of nasolabial fold, facial deviation , drooling of saliva, using tissues again & again .
NG in place,

Olfactory Nerve

1. Do you have any problem with smell?
2. Avoid detailed testing. inform examiner at the end I want to do it

2^{nd},3^{rd},4^{th},6th

1. Look at posture of Head: tilt of head indicates compensatory posture to correct diplopia
2. Look for ptosis
3. Look for position of eyeballs: both should be in center in normal forward gaze
4. Check Visual Acuity
5. Check Colour Vision
6. Light Reflex (2^{nd}, 3^{rd})
7. Accommodation Reflex (2^{nd}, 3^{rd})
8. Check Movements in H shape
9. Check Field of Vision
10. Fundoscopy: perform at the end if time permits or inform examiner

5th CN

Motor Part:

1. Ask him to clench his teeth. Check/feel bulk of masseters
2. Ask him to clench his teeth. Check/feel bulk of temporalis
3. Ask him to move jaw from side to side and then against resistance
4. Jaw Jerk (PERFORM ONLY if any +ve finding in motor exam)

Sensory Part:

1. Check Touch, Pain, Temperature in each division of 5^{th} Nerve separately and compare
2. Corneal reflex
3. Conjunctival reflex avoid these reflexes, uncomfortable for patient

7^{th} , 8^{TH}

1. Check hyperacusis (7^{th}) or Decreased Hearing (8^{th}) … fingers tapping on both sides, then close one side with finger and test other side … and vice versa
2. Frowning : ask him to look at ceiling …. ماتھے پر بل ڈالیں
3. Ask him to close eyes forcefully and try to open
4. Look for dribbling of saliva / patient taking tissue to clean saliva
5. See nasolabial folds
6. Ask him to show teeth and comment on deviation of angle of mouth
7. Ask him to smile
8. Ask him fill cheeks with air and then gently tap
9. Check corneal & conjuctival reflex (Avoid)

Tell examiner you will like to check whistling, taste over anterior 2/3 of tongue

9^{th},10^{th}

1. Is NG in place i.e. gag not intact
2. Nasal twang in speech : Ask him to say egg .. he will say eng
    a. **OPNE MOUTH….**
3. See uvula . is it central?
4. Aah test: ask him to say aah. See if uvula elevates and posterior pharyngeal wall constricts
5. Ask him to cough
6. Check gag reflex. Touch each side of pharynx separately **[ASK EXAMINER before proceeding)**
7. Palatal Reflex: touch soft palate with blunt probe, ask patient about felt or not (sensory) , check movements of soft palate
8. Check taste over posterior 1/3 of tongue (omit)
9. Carotid massage and observe associated slowing of heart rate (omit)
10. Indirect laryngoscopy (Omit)
11. Carotid massage (Omit)

Examination of 11^{th} nerve

1. Look at bulk , wasting , atrophy of both muscles
2. Look for involuntary movements
3. Test each sternocleidomastoid separately. Feel the opposite muscle
4. Ask him to move head down normal and than against resistance
5. Ask him to shrug his shoulders for trapezius

Examination of 12^{th} nerve

1. Examine the tongue with in oral cavity for fasciulations, wasting
2. Ask him to protrude. Look for deviation.
3. Ask him to move tongue on each side
4. Move tongue on each side against cheek. Check for resistance

TELL EXAMINER I would like to complete Exam by

1. Ding Fundoscopy 2. Checking taste 3. Checking smell in detail
4. I omitted corneal, conjunctival, gag reflex for patient comfort

motor

Examine ALL cranial Nerves

Pre-Exam
Sit on chair OR stand on right side of patient… Sit at level with patient
Greetings: Asalam-o-Alaikum
Introduction
Consent: I shall examine your face
Ask Patient Name and call him/her by name instead of calling Aman g, Bibi etc. **Meanwhile assess Hoarseness**
Inspect
Obvious findings: ptosis, proptosis, loss of nasolabial fold, facial deviation , drooling of saliva, using tissues again & again . NG in place,
2nd,3rd,4th,6th
1. Look at posture of Head: tilt of head indicates compensatory posture to correct diplopia 2. Look for ptosis 3. Look for position of eyeballs: both should be in center in normal forward gaze 4. Light Reflex (3rd) 5. Accommodation Reflex (2nd, 3rd) 6. Check Movements in H shape
5th CN
Motor Part: 1. Ask him to clench his teeth. Check/feel bulk of masseters 2. Ask him to clench his teeth. Check/feel bulk of temporalis 3. Ask him to move jaw from side to side and then against resistance 4. Jaw Jerk (PERFORM ONLY if any +ve finding in motor exam)
7th , 8TH
1. Check hyperacusis (7th) or Decreased Hearing (8th) … fingers tapping on both sides, then close one side with finger and test other side … and vice versa 2. Frowning : ask him to look at ceiling …. ماتھے پر بل ڈالیں 3. Ask him to close eyes forcefully and try to open 4. Look for dribbling of saliva / patient taking tissue to clean saliva 5. See nasolabial folds 6. Ask him to show teeth and comment on deviation of angle of mouth 7. Ask him to smile 8. Ask him fill cheeks with air and then gently tap 9. Check corneal & conjuctival reflex (Avoid) Tell examiner you will like to check <u>whistling</u>,

9th,10th

1. Is NG in place i.e. gag not intact
2. Nasal twang in speech : Ask him to say egg .. he will say eng
    a. **OPNE MOUTH….**
3. See uvula . is it central?
4. Aah test: ask him to say aah. See if uvula elevates and posterior pharyngeal wall constricts
5. Ask him to cough
6. Check gag reflex. Touch each side of pharynx separately **[ASK EXAMINER before proceeding)**
7. Palatal Reflex: touch soft palate with blunt probe, ask patient about felt or not (sensory) , check movements of soft palate
8. Indirect laryngoscopy (Omit)

Examination of 11th nerve

1. Look at bulk , wasting , atrophy of both muscles
2. Look for involuntary movements
3. Test each sternocleidomastoid separately. Feel the opposite muscle
4. Ask him to move head down normal and than against resistance
5. Ask him to shrug his shoulders for trapezius

Examination of 12th nerve

1. Examine the tongue with in oral cavity for fasciulations, wasting
2. Ask him to protrude. Look for deviation.
3. Ask him to move tongue on each side
4. Move tongue on each side against cheek. Check for resistance

TELL EXAMINER about what relevant examination you will like to do

e.g. other cranial nerves , or check sensory component of cranial nerves , limb exam

Examine ALL cranial Nerves sensory

Pre-Exam
Sit on chair OR stand on right side of patient… Sit at level with patient
Greetings: Asalam-o-Alaikum
Introduction
Consent: I shall examine your face
Ask Patient Name and call him/her by name instead of calling Aman g, Bibi etc. **Meanwhile assess Hoarseness**
Inspect
Obvious findings: ptosis, proptosis, loss of nasolabial fold, facial deviation , drooling of saliva, using tissues again & again . NG in place,
Olfactory Nerve
1. Do you have any problem with smell? 2. Avoid detailed testing. inform examiner at the end I want to do it
2nd,3rd,4th,6th
1. Check Visual Acuity 2. Check Colour Vision 3. Light Reflex (2nd, 3rd) 4. Accommodation Reflex (2nd, 3rd) 5. Check Field of Vision 6. Fundoscopy: perform at the end if time permits or inform examiner
5th CN
Sensory Part: 1. Check Touch, Pain, Temperature in each division of 5th Nerve separately and compare 2. Corneal reflex 3. Conjunctival reflex avoid these reflexes, uncomfortable for patient
7th , 8TH
1. Check Decreased Hearing (8th) … fingers tapping on both sides, then close one side with finger and test other side … and vice versa 2. Check corneal & conjuctival reflex (Avoid) 3. Tell examiner you will like to check taste over anterior 2/3 of tongue
9th,10th
1. Check gag reflex. Touch each side of pharynx separately **[ASK EXAMINER before proceeding)** 2. Palatal Reflex: touch soft palate with blunt probe, ask patient about felt or not (sensory) , check movements of soft palate 3. Check taste over posterior 1/3 of tongue (omit) 4. Carotid massage and observe associated slowing of heart rate (omit) 5. Indirect laryngoscopy (Omit) 6. Carotid massage (Omit)
TELL EXAMINER I would like to complete Exam by Doing relevant exam i.e. motor component of cranial nerves, limb exam etc

Cerebellar Examination Check List

Action	
Pre-Exam	
Stand on right side of patient	
Greetings: Asalam-o-Alaikum	
Introduction	
Consent	Assess speech
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.	
Position: if supine , ask to sit and fold arms	Truncal Ataxia
Examination	
Look **posture** – in unilateral lesion , patient droops down toward affected side	
Ask patient if he is having weakness of any limb/side . Cerebellar signs cant be checked if power is less than +4/5	
1. Nystagmus in Eyes: Go so much that canthus is buried , not farther than that Check both horizontal & vertical nystagmus	
2. Scanning Speech : Talk to him , ask his complete address or ask to say "Constantinople" in urdu	
3. Upper Limbs: 1. **Hypotonia** : check only at elbow 2. **Intention Tremors , Dysmetria i.e. past-pointing** : perform finger-nose-finger test 3. **Dysdiadochokinesia** : Ask him to clap hands alternatively with palm and dorsum 4. **Rebound phenomenon** : Ask to flex elbow against resistance , can hit face (You can tell examiner I did not performed it as there is chance of injury to patient) or press against hands straight forward and then suddenly release	
4. Lower Limbs : 1. **Pendulous Knee jerk** 2. **Make him stand :** patient sways towards affected side 3. **Broad based Gait: ask him to walk** 4. **Tandem Walking:**	
5. Check VII & VIII Cranial Nerves	**Shawanoma**
6. Auscultate Cerebelli	**?**
7. If unilateral signs, auscultate heart	**Source of thrombus**
If Command is to check cerebellar signs in lower limb only , then check 1. Tone 2. Heel-shin-heel test 3. Toe-finger-Toe test 4. Rebound phenomenon : ask him to raise leg against resistance and then release 5. Make him stand 6. Gait 7. Tandem walking 8. Pendulous knee jerk	

Others By Dr. Zaman …. Reason ?

Pupillary reflex in eyes

Oral (Ginivae) phenytoin

Neck (Thyroid , Lymph Nodes)

Pes Cavus (Foot)

Motor System of Lower Limb

Pre-Exam

Stand on right side of patient

Greetings: Asalam-o-Alaikum

Introduction

Consent

Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.

Exposure

Ask if pain in any part of body

Examination (WIP-TPRC)

1. **Look** for
   i. Bulk & Wasting . Measure if required
   ii. Involuntary movements
   iii. Abnormal Posturing
2. Look for **fasciulations.** Tap and observe for 10 sec
3. **Tone:**
   i. Rotate each leg separately while its on bed. Look at movements of feet
   ii. Flex Legs at knee joint . lift by putting hands below lower thigh
   iii. Flex both legs at knee joint after making them fully straight
   iv. Check tone at ankle joint

DO NOT comment on cog-wheel in lower limb as rotatory movement is required for that

4. **Power:**
   i. Ask him to raise legs. If cant lift both legs , ask him to raise arms (to see quadriplegia or hemiplegia) check power in feet even if he cant raise leg
   ii. If can lift legs , check power at each joint
      a. Hip : Flexion , extension , Abduction , adduction
      b. Knee: Flexion , extension
      c. Ankle: flexion, extension
5. **Reflexes: Re-ensure patient hammer will not harm you.** If reflex not elicited , perform **Jendrassik maneuver**
   i. Knee jerk
   ii. Ankle jerk
6. **Plantars : Tell him what you are going to do. Ask for pain in toe**

If not elicited , *Gordon's sign , Oppenheim's sign , Chaddock signs*

7. **Clonus: Check ankle clonus & patellar clonus**

   Check clonus if plantars upgoing or tone is increased
8. Coordination :
   Perform Heel Shin Heel test
9. Gait:
10. Ask him to sit and then stand without support

Relevant Examination (Modify case to case)

1. **Is folley in place?** Sphincters not intact
2. **Paraplegia :** check pain . locate sensory level
3. **Quadreplegia :** check pain in both upper & lower limb. And get sensory level
4. Hemiplegia: check upper limb motor system , facial nerve , NG,

Motor System of Upper Limb

Pre-Exam

Stand on right side of patient

Greetings: Asalam-o-Alaikum

Introduction

Consent

Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.

Exposure

Ask if pain in any part of body

Examination (WIP-TPRC)

1. **Look** for
   - i. Bulk & Wasting . Measure if required
   - ii. Involuntary movements
   - iii. Abnormal Posturing
2. Look for **fasciulations.** Tap and observe for 10 sec
3. **Tone:**
   - i. Wrist Joint : for cogwheel rigidity
   - ii. Elbow Joint : for spasticity , lead pipe rigidity extend elbow from fully flexed position
4. **Power: Fix proximal joint while checking power at joint distal to that**
   - **i.** Ask him to raise both arms
   - **ii.** Check power as :
     a. **Fingers :** flexors , extensors ; fix wrist joint
     b. **Wrist:** flexors , extensors **; hold forearm** close fist and then move it
     c. **Elbow:** flexors , extensors
     d. **Shoulder :** abduction , adduction (Hold below elbow and ask to move out & in)

   Normal & against resistance
5. **Reflexes: Re-ensure patient hammer will not harm you.** If reflex not elicited , perform **Jendrassik maneuver**
   - i. Biceps
   - ii. Triceps
   - iii. Brachioradialis
6. **Hoffaman Sign:**
7. **Coordination :** finger-nose-finger test

Relevant Examination (Modify case to case)

1. **Is NG in place?** gag not intact
2. **Check sensory level**

Gait

Step	Command	
1	Make the patient stand	Stroke patient will not be able to stand
2	Ask him to walk normally for few feet	Base of gait , gross cerebellar deficit , parkinsonian gait
3	AND turn back	Parkinsonism difficulty in turning back
4	Come back with Tandem Walking	Suttle cerebellar deficit
5	Ask him to close feet , then with hands in front	Cerebellar atxia
6	Step 5 + close eyes	Romberg's test… posterior column deficit
7	Sit and get up without support	Proximal wekaness

Motor Neuron Disease

Command: **Examine the lower limb and do the relevant**

	PRE-EXAM	
	Stand on right side of patient	
1	Greetings: Asalam-o-Alaikum, Shake Hand	
	Introduction	
	Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.	**i. Assess speech:** Spastic (Dysarthria, Nasal) ii. Note any facial weakness
	Ask which language can he/she understand better?	
	Consent	
	Position: lying flat	
	Ask if patient is having an IV line (Branula), if yes, at which site	
	Look for NG, Foley, Drain and its contents	
	Examination Proper	
2	**Motor System:** 1. Look for: i. Bulk & Wasting. ii. Involuntary movements iii. Abnormal Posturing 2. Look for fasciulations. Tap and observe for 10 sec 3. Tone: 4. Power: 5. Reflexes: i. Knee jerk ii. Ankle jerk 6. Plantars: 7. Clonus: Check ankle clonus & patellar clonus Check clonus if plantars upgoing or tone is increased 8. Coordination:	Mixed lower and upper motor neuron signs e.g. Fasciulations +ve Hypotonia Some reflexes +++, some + wasting
3	**Sensory System of Lower Limb:** i. Pin prick ii. Vibration	intact
4	Upper Limbs: Look: specially at hands Power Reflexes Hoffman's sign	Loss of bulk specially ➢ between thumb and index ➢ eminences
5	Assess facial weakness: i. wrinkling of forehead ii. nasolabial fold iii. smile iv. show teeth	
6	Open Mouth: i. Fasciculations in tongue ii. Tongue atrophy iii. Protrude tongue iv. See uvula v. Tell examiner I will like to check Gag reflex	Weakness
7	Check extraocular movements (Grossly)	Intact
8	Check chest expansion	If no time, tell examiner
9	Sir I would like to examine for i. Chest expansion ii. Cognitive functions	?

Horner Syndrome

Command: Examine the eyes and do the relevant

	Action	Significance
	Pre-Exam	
	Stand on right side of patient	
	Greetings: Asalam-o-Alaikum	
	Introduction	
	Consent	Assess speech
	Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.	
	Position: if supine, ask to sit	
	Examination	
1	**Examine Eyes:** I. Look for Enophthalmos II. Ptosis (Marginal Reflex Distance MRD) III. Pupillary right reflex IV. Ask him to look upward V. Check Extraocular movements	 Unable to look R°Brainstem Stroke
2	Touch face / arms/ shoulder for sweating	Anhydrosis
3	Look at neck i. Scars ii. Acanthosis Nigricans iii. Swellings/ lumps iv. Palpate Lymph Nodes v. Palpate Thyroid vi. Palpate carotid	 ?
4	Upper Chest i. Tenderness ii. Percuss and auscultate	
5	Hands: i. Clubbing ii. Nicotine staining iii. Wasting of small muscles of hands iv. Check grip v. Check sensations vi. Pulse ….Examine for cervical ribs (raise hand and check for decreasing volume)	
6	Arms: i. Acanthosis Nigricans ii. Axillary Lymph Nodes	
7	Check for Plantars	Multiple Sclerosis
8	Fundoscopy	

Speech Examination Check List

Action	Performed	
	Yes	**No**
Pre-Exam		
Stand on right side of patient		
Greetings: Asalam-o-Alaikum		
Introduction		
Consent		
Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.		
Ask 4 things before proceeding for exam		
1. What language do you speak and understand? (first language)		
2. Are you right or left handed? (to know dominant lobe)		
3. How much are you literate?		
4. Is any part of your body weak i.e. right or left sided paralysis? (e.g. if you ask him to raise left hand and he is paralyzed on that side)		
Speech Examination		
1. Start conversation with patient for 1-2 minutes and assess for **a. Rate** **b. Fluency** **c. Is speech sensible?** Does he use words correctly **Command:** What is your name , complete address .how will you go home from this place? What do you do? What have you done since morning? **And continue conversation**		
2. Check Comprehension i.e. understanding (DO NOT give visual clues) a. Give command with yes or no answer? Is this a pen? b. Simple command Close your eyes OR raise your left arm OR open your mouth c. Complex Commands: Give him piece of paper and ask to Pick paper from bed , fold it and put it in your left pocket (cross midline) OR With your right hand touch your nose and then your left ear.'		
3. Assess Naming can restrict to a **a.** Ask him to name familiar objects that are to hand e.g. watch , keys,pen b. Tell me names of all animals you know (Normal: 18-22 in 1 min) c. Tell all the words beginning from alphabet A or B		
4. Repetition: Ask him to repeat اگر مگر لیکن یا چونکہ چنانچہ اگرچہ		
5. Reading : Check there is no visual impairment a. Ask him to read a sentence b. Give him a written command to follow e.g. Mr. Asghar : Close your eyes		
6. Writing: Ask him to write a sentence		
7. Calculation: Adjust to premorbid expectations. a. Ask him 100-7 = _____ and so on b. Ask him 3+3=_____ , +3 =____ and so on c. Ask him complex commands 2 + 3; 7 + 12; 21 − 9; 4 × 7; 36 ÷ 9 etc		

Parkinsonism

Command: **Examine the face and do the relevant**

	PRE-EXAM	
	Stand on right side of patient	
1	Greetings: Asalam-o-Alaikum, Shake Hand	Cog-wheel rigidity
	Introduction	
2	Ask Patient Name and call him/her by name instead of calling Aman g , Bibi etc.	**Assess speech:** i. Monotonous ii. Low volume iii. Tremulous
	Ask which language can he/she understand better?	
	Consent	
	Position: sitting	
	Ask if patient is having an IV line (Branula), if yes, at which site	
	Look for NG, Foley, Drain and its contents	
	Examination Proper	
3	Step Back, Look at face	Mask-like Expressionless
4	Put hands in lap in semi-prone position	Resting Pill rolling tremors
5	Close eyes gently	Blepharoclonus - tremors
6	Glabellar tap from behind or side	Myerson's sign
7	Again shake hand	Cog-wheel rigidity
8	Flex elbow	Lead pipe rigidity
9	Ask patient to rapidly and repeatedly oppose thumb and index finger … test both hands	
10	Stand up	bradykinesia
11	Walk … assess gait	i. Freezing – difficulty in initiating movement ii. Stooped posture iii. Narrow based gait iv. Hesitant shuffling gait v. Decreased arm swing vi. Difficulty in stopping and turning rapidly back
12	**Retropulsion / Pull Test:** I am going to pull you from hip. Keep your balance. you can take steps back if needed	+ve = Postural Instability +ve if Person takes ≥3 steps Or Falls without taking a step
13	Ask patient to sit and **examine Eyes** for i. Vertical gaze palsy ii. Horizontal nystagmus (cerebellar)	
14	Perform Finger **Nose Test**	Dysdiadochokinesia
15	Check hand writing	micrographia
15	Ask patient to lie and check **Plantars**	
16	Sir I would like to check i. Blood Pressure for orthostatic hypotension ii. Mini Mental State Exam iii. For seborrhea (sweating) iv. Fundoscopy Retinitis Pigmentosa	 Shy-Drager syndrome For dementia ? in Hallervorden- Spatz Disease / Pantothenate kinase-associated neurodegeneration

Causes of Proximal Myopathy:

Endocrine	Acromegaly Hyperthyroidism, Hypothyroidism Hyper-parathyroidsm, hypo-parathyroidsm (osteomalacia) Cushing Syndrome
Rheumatologic	Dermatomyositis, Polymyositis, Inclusion body myositis RA, SLE
NMJ Dx	Myasthenia Gravis, Lambert Eaten Syndrome
Drugs	Corticosteroids, Statins, fibrates Zidovudine, alcohol, amiodarone
Metabolic	Enzyme deficiency, mitochondrial disease
Muscular dystrophy	Limb girdle muscular dystrophy, Fascio-scapulo-humeral dystrophy

Proximal Myopathy Examination

Command: Examine the lower limbs neurologically and do the relevant

Neurological Examination	
Inspection	Symmetric wasting
Palpation	Check tenderness
Bulk, Tone,	
Power	Check for repetitive testing (MG. Lambert eaten)
, Reflexes, Plantars	+++ in hyperthyroidism, + or – in hypothyroidism with delayed relaxation
Coordination,	
Gait	Waddling gait
Gower Sign	
Relevant Examination to find Etiology	
Look	i. Moon face ii. Buffalo hump iii. Visible thyroid swelling
Hands	i. Sweating / coarse skin (in hyper or hypo thyroidism) ii. Signs of acromegaly iii. Tremors iv. Gottron Papules v. Paper Thin Skin
Pulse	Hyperthyroidism
B.P.	Cushing Syndrome, Thyrotoxicosis , hypothyroidism
Hair	Coarse in hypothyroidism
Face	Heliotrope rash V sign Thyroid eye disease Cataract in Cushing's Chvostek Sign
Sternum	Bone tenderness IN osteomalacia
Go on back	Palpate thyroid Auscultate chest – ronchi of asthma for which might be taking steroids , small cell CA
Legs	Non pitting edema in hypothyrodism